

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Letters Patent of:  
Reza P. Rassool et al.

Patent No.: 7,043,473

Issued: May 9, 2006

For: MEDIA TRACKING SYSTEM AND METHOD

**REQUEST FOR CERTIFICATE OF CORRECTION  
PURSUANT TO 37 CFR 1.323 AND PATENT OFFICE MISTAKE (37 CFR 1.322)**

Attention: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Upon reviewing the above-identified patent, Patentee noted several patent office errors which should be corrected.

The following errors were not in the application as filed by applicant:

In the Application:

First Page Col. 2 (Foreign Patent Documents), Line 1, After "658054" delete "BA" and insert -- B1 --.

First Page Col. 2 (Attorney, Agent or Firm), Line 2, After "Darby" insert -- P.C. --.

Page 2 Col. 1 (U.S. Patent Documents), Line 40, After "6,314,409" delete "B1" and insert -- B2 --.

Page 2 Col. 1 (U.S. Patent Documents), Line 48 After “6,409,080” delete “B1” and insert -- B2 --.

Page 2 Col. 1 (U.S. Patent Documents), Line 58 Delete “1/2003” and insert -- 9/2003 --.

Page 2 Col. 2 (U.S. Patent Documents), Line 1, After “6,634,028” delete “B1” and insert -- B2 --.

Page 2 Col. 2 (U.S. Patent Documents), Line 6, After “6,654,423” delete “B1” and insert -- B2 --.

Page 2 Col. 2 (Other Publications), Line 1, Delete “.htm,” and insert -- .html, --.

Page 2 Col. 2 (Other Publications), Line 13, Delete “chapter” and insert -- chapters --.

Column 12, Line 67, Delete “ $P_{\{co\}}^{CG}$ ,” and insert - -  $P_{\{co\}}^{CG}$  , - -.

Enclosed please find marked up copies of the List of References, Copy of Issue Fee Payment, and a copy of page 16 of the Specification.

The following errors were found in the application as filed by applicant. The errors now sought to be corrected are inadvertent typographical errors, the correction of which does not involve new matter or require reexamination.

Page 2 Col. 2 (Other Publications), Delete “Immage” and insert -- Image --.

Column 2, Line 11, Delete “Nework” and insert -- Network --.

Column 3, Line 52, Delete “the” before “those”.

Column 12, Line 66, Delete "center of gravity" and insert -- center-of-gravity--.

Column 13, Line 16, Delete "center of gravity" and insert -- center-of-gravity--.

Column 18, Line 3, Delete "center of gravity" and insert -- center-of-gravity--.

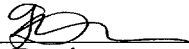
Column 38, Line 59, In Claim 24, after "file" insert -- , --.

Transmitted herewith is a proposed Certificate of Correction effecting such amendment.  
Patentee respectfully solicits the granting of the requested Certificate of Correction.

The Commissioner is authorized to charge any deficiency of up to \$300.00 or credit any excess in this fee to Deposit Account No. 04-0100. Payment of \$100.00 is enclosed herewith.

Dated: June 30, 2006

Respectfully submitted,

By   
Flynn Barrison  
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Attorneys/Agents For Applicant

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 2

PATENT NO. : 7,043,473  
APPLICATION NO. : 09/988,824  
ISSUE DATE : May 9, 2006  
INVENTOR(S) : Reza P. Rassool et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**In the Application:**

**First Page Col. 2 (Foreign Patent Documents), Line 1, After "658054" delete "BA" and insert -- B1 --.**

**First Page Col. 2 (Attorney, Agent or Firm), Line 2, After "Darby" insert -- P.C. --.**

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**Page 2 Col. 2 (U.S. Patent Documents), Line 1, After "6,634,028" delete "B1" and insert -- B2 --.**

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**Page 2 Col. 2 (U.S. Patent Documents), Line 6, After “6,654,423” delete “B1” and insert -- B2 --.**

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**Column 38, Line 59, In Claim 24, after “file” insert -- , --.**

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Substitute for form 1449A/B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)			Application Number	09/988,824	
			Filing Date	November 20, 2001	
			First Named Inventor	Reza Rassool	
			Art Unit	2171	
			Examiner Name	B. D. Goddard	
Sheet	2	of	3	Attorney Docket Number	08223/1200339-US1

BG	47	US-6,640,304-B1	10-28-2003	Ginter et al.	
	48	US-6,668,325-B1	12-23-2003	Collberg et al.	
	49	US-6,459,427-B1	10-01-2002	Mao, et al.	
	50	US-6,314,572-B1	11-06-2001	LaRocca, et al.	
	51	US-6,191,782-B1	02-20-2001	Mori, et al.	
	52	US-6,009,116-B1	12-28-1999	Bednarek, et al.	
	53	US-5,758,257-B1	05-26-1998	Herz, et al.	
	54	US-5,621,799-B1	04-15-1997	Katta, et al.	
	55	US-6,654,423-B2	11-25-2003	Jeong et al.	
	56	US-6,651,170-B1	11-18-2003	Rix	
	57	US-6,629,243-B1	09-30-2003	Kleinman et al.	
	58	US-6,505,299-B1	01-07-2003	Zeng et al.	
	59	US-6,409,089-B1	06-25-2002	Eskicioglu	
	60	US-6,409,080-B2	06-25-2002	Kawagishi	
	61	US-6,334,213-B1	12-25-2001	Li	
	62	US-6,298,441-B1	10-02-2001	Handelmann et al.	
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	64	US-6,253,193-B1	06-26-2001	Ginter et al.	
	65	US-6,189,097-B1	02-13-2001	Tycksen, Jr. et al.	
	66	US-6,178,242-B1	01-23-2001	Tsuria	
	67	US-6,112,181-B1	08-29-2000	Shear et al.	
	68	US-6,055,503-B1	04-25-2000	Horstmann	
	69	US-6,038,433-B1	03-14-2000	Vegt	
	70	US-6,009,525-B1	12-28-1999	Horstmann	
	71	US-5,982,891-B1	11-09-1999	Ginter et al.	
	72	US-5,939,975-B1	08-17-1999	Tsuria et al.	
	73	US-5,923,666-B1	07-13-1999	Gledhill et al.	
	74	US-5,920,625-B1	07-06-1999	Davies	
	75	US-5,915,019-B1	06-22-1999	Ginter et al.	
	76	US-5,883,957-B1	03-16-1999	Moline et al.	
	77	US-5,799,089-B1	08-25-1998	Kuhn et al.	
	78	US-5,774,527-B1	06-30-1998	Handelman et al.	
	79	US-5,640,546-B1	06-17-1997	Gopinath et al.	
	80	US-5,590,200-B1	12-31-1996	Nachman et al.	
	81	US-5,375,168-B1	12-20-1994	Kudelski	
	82	US-5,134,656-B1	07-28-1992	Kudelski	
	83	US-5,067,035-B1	11-19-1991	Kudelski et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.†	Foreign Patent Document Country Code* Number* Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†
BG	84	WO-99/30499-A1	06-17-1999	Thomson Consumer Electronics, Inc.		
	85	EP-714204-B1	05-29-1996	LG Electronics, Inc.		
	86	WO-96/32702-A1	10-17-1996	Smart TV Co.		
	87	WO-99/54453-A1	10-28-1999	Henriksen, et al.		
	88	WO-96/06504-A1	02-29-1996	Chaney, et al.		
	89	EP-658054-B1	06-14-1995	News Datacom Ltd.		
	90	WO-01/35571-A1	05-17-2001	Widvine Technologies, Inc.		
Examiner Signature	Brian Goddard			Date Considered	1/3/05	

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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Jamie L. Wiegand (Depositor's name)  
March 10, 2006 (Date)

7278 7590 12/20/2005  
DARBY & DARBY P.C.  
P. O. BOX 5257  
NEW YORK, NY 10150-5257

03/14/2006 EAYALEW2 00000001 09988824

01 FC:2501 700.00 OP

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,824	11/20/2001	Reza P. Rassool	08223/1200339-US1	8821

TITLE OF INVENTION: MEDIA TRACKING SYSTEM AND METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$700	\$0	\$700	03/20/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
GODDARD, BRIAN D	2161	707-104100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. Jamie L. Wiegand

2. Darby & Darby PC

3.

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

Widevine Technologies, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Seattle, Washington

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies

4b. Payment of Fee(s):

- ☒ A check in the amount of the fee(s) is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge deficiencies to deposit any overpayment, to Deposit Account Number 04-0100 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Date March 10, 2006

Typed or printed name Jamie L. Wiegand

Registration No. 52,361

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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		Filing Date	November 20, 2001		
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		Art Unit	2171		
		Examiner Name	B. D. Goddard		
Sheet	1	of	3	Attorney Docket Number	08223/1200339-US1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.†	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code‡ (§ known)			
BG	1	US-5,144,663-B1	09-01-1992	Kudelski et al.	
	2	US-5,539,450-B1	07-23-1996	Kudelski et al.	
	3	US-5,592,212-B1	01-07-1997	Handelman	
	4	US-5,666,412-B1	09-09-1997	Handelman et al.	
	5	US-5,774,546-B1	06-30-1998	Handelman et al.	
	6	US-5,805,705-B1	09-08-1998	Gray et al.	
	7	US-5,892,900-B1	04-06-1999	Ginter et al.	
	8	US-5,917,912-B1	06-29-1999	Ginter et al.	
	9	US-5,920,861-B1	07-06-1999	Hall et al.	
	10	US-5,933,498-B1	08-03-1999	Schneck et al.	
	11	US-5,949,876-B1	09-07-1999	Ginter et al.	
	12	US-6,009,401-B1	12-28-1999	Horstmann	
	13	US-6,021,197-B1	02-01-2000	von Willich et al.	
	14	US-6,049,671-B1	04-11-2000	Slivka et al.	
	15	US-6,073,256-B1	06-06-2000	Sesma	
	16	US-6,157,721-B1	12-05-2000	Shear et al.	
	17	US-6,185,683-B1	02-06-2001	Ginter et al.	
	18	US-6,247,950-B1	06-19-2001	Hallam et al.	
	19	US-6,256,668-B1	07-03-2001	Slivka et al.	
	20	US-6,285,985-B1	09-04-2001	Horstmann	
	21	US-6,314,409-B2	11-06-2001	Schneck et al.	
	22	US-6,389,402-B1	05-14-2002	Ginter et al.	
	23	US-6,405,369-B1	06-11-2002	Tsuria	
	24	US-6,466,670-B1	10-15-2002	Tsuria et al.	
	25	US-6,587,561-B1	07-01-2003	Sered et al.	
	26	US-6,634,028-B2	10-14-2003	Handelmann	
	27	US-6,654,420-B1	11-25-2003	Snook	
	28	US-4,694,489-B1	09-15-1987	Frederiksen	
	29	US-5,684,876-B1	11-04-1997	Pinder, et al.	
	30	US-5,878,134-B1	03-02-1999	Handelman, et al.	
	31	US-6,035,037-B1	03-07-2000	Chaney	
	32	US-6,226,794-B1	05-01-2001	Anderson Jr., et al.	
	33	US-6,449,719-B1	09-10-2002	Baker	
	34	US-2003/0007568-A1	01-09-2003	Hamery, et al.	
	35	US-6,658,568-B1	12-02-2003	Ginter et al.	
	36	US-6,618,484-B1	09-09-2003	Van Wie et al.	
	37	US-6,427,140-B1	07-30-2002	Ginter et al.	
	38	US-6,292,569-B1	09-18-2001	Shear et al.	
	39	US-6,237,786-B1	05-29-2001	Ginter et al.	
	40	US-5,943,422-B1	08-24-1999	Van Wie et al.	
	41	US-5,910,987-B1	06-08-1999	Ginter et al.	
	42	US-5,922,208-B1	07-13-1999	Demmers	
	43	US-6,138,119-B1	10-24-2000	Hall et al.	
	44	US-6,240,185-B1	05-29-2001	Van Wie et al.	
	45	US-6,363,488-B1	03-26-2002	Ginter et al.	
	46	US-6,449,367-B1	09-10-2002	Van Wie et al.	

Examiner Signature	Brian Goddard	Date Considered	1/3/05
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		Art Unit	2171		
		Examiner Name	B. D. Goddard		
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cited No.†	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code*	Number* Kind Code* (if known)				
BG 1 BG	84	WO-99/30499-A1		06-17-1999	Thomson Consumer Electronics, Inc.		
	85	EP-714204-B1		05-29-1996	LG Electronics, Inc.		
	86	WO-96/32702-A1		10-17-1996	Smart TV Co.		
	87	WO-99/54453-A1		10-28-1999	Henriksen, et al.		
	88	WO-96/06504-A1		02-29-1996	Chaney, et al.		
	89	EP-658054-B1		06-14-1995	News Datacom Ltd.		
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	09/988,824		
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		First Named Inventor	Reza Rassool		
		Art Unit	2171		
		Examiner Name	B. D. Goddard		
Sheet	3	of	3	Attorney Docket Number	08223/1200339-US1

91	WO-02/21761-A2	03-14-2002	Widevine Technologies, Inc.
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published.	T*
DG	92	<a href="http://www.ntt.co.jp/news/news02a/0209/020927.html">http://www.ntt.co.jp/news/news02a/0209/020927.html</a> , September 27, 2002.	
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single valued function of one or more variables that can be measured from the associated pixel. For example, if the image is a grayscale image, the sampled level of a particular grid point can be taken to be the gray level of the associated pixel. If the image is in color, the sampled value could be the level of the red, green or blue components of the underlying pixel, or could be a combination of one or more color components such as the color (i.e., hue), saturation (i.e., intensity) or brightness of the pixel. Other measurable pixel values include temperature, emissivity, density or a combination thereof. The levels of all grid points (and of the associated neighborhood points for each grid point) may be measured and stored prior to each iteration of the warp grid algorithm.

[0063] The grid 16 is spatially adapted to the image 12 with each iteration of the warp grid algorithm. Each given point 18 of the grid 16 may be displaced in the u, v coordinate system from its current position by an offset vector determined from the sampled values and positions of the grid points within the connection pattern of the given grid point 18. Each point 18 in the warp grid 16 is displaced with each iteration in accordance with a basic offset calculation described below.

[0064] In this exemplary procedure for calculating the offset vector to be applied to a given grid point in the warp algorithm spatial adaptation step, the offset vector is calculated from the positions and sampled values of all the grid points in the connection pattern surrounding the given current grid point. Preferably, the offset vector for each current grid point is calculated as a scaling of the position of the center-of-gravity of all of the points in the connection pattern of the given current grid point relative to the position of each current point. In this center-of-gravity calculation, the individual connection pattern grid points are, in effect, weighted by their level values obtained from the associated (i.e., underlying) pixels.

[0065] A mathematical description of this center-of-gravity calculation will now be provided. Mathematically, if  $p_0$  denotes the current position value of a given point in a warp grid measured in the u, v coordinate system and  $\{C_0\}$  denotes a set of C points which constitute the connection pattern of  $p_0$ , including  $p_0$  itself, then the center of gravity of the connection pattern,  $p_{\{C_0\}}^{CG}$ , is given by:

$$p_{\{C_0\}}^{CG} = \frac{\sum_{p \in \{C_0\}} [L(p) \times p]}{\sum_{p \in \{C_0\}} [L(p)]},$$